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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,994	08/02/2001	Rui Xie	D-6400 CIP	8016

7590 06/17/2009
Crompton Corporation
Benson Road
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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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06/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/919,994
Filing Date: August 02, 2001
Appellant(s): XIE ET AL.

Keith DS Fredlake
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 11, 2009 appealing from the Office action mailed July 9, 2008.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. 4,101,473	Lander	7-1978
U.S. 4,624,996	Rizk et al.	11-1986
U.S. 5,703,193	Rosenberg et al.	12-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Issue I: Rejection of Claims 34-44 as Being Anticipated by Rosenberg et al.

Claims 34-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al. ('193).

Patentees disclose the removal of isocyanate monomers from isocyanate prepolymers, wherein solvents, which have boiling point properties that meet those of appellants' solvents, are added to the prepolymer reaction components at the start of or during prepolymer synthesis. The resulting solvent containing prepolymers are then subjected to distillation to obtain products having levels of isocyanate monomers that meet the instantly claimed levels. Furthermore, the reference discloses that MDI is a suitable diisocyanate for the process. See abstract and columns 2-6, especially column 6, lines 13+. The position is taken that the disclosure at column 6, lines 13+ is sufficient to anticipate appellants' initial isocyanate dissolving process step.

Issue II: Rejection of Claim 45 as Being Obvious Over Rosenberg et al.

in View of Rizk or Lander

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al. ('193) in view of Rizk et al. ('996) or Lander ('473).

As aforementioned, Rosenberg et al. disclose the removal of isocyanate monomers from isocyanate prepolymers, wherein solvents, which have boiling point properties that meet those of appellants' solvents, are added to the prepolymer reaction components at the start of or during prepolymer synthesis. The resulting solvent containing prepolymers are then subjected to distillation to obtain products having levels of isocyanate monomers that meet the instantly claimed levels. Furthermore, the reference discloses that MDI is a suitable diisocyanate for the process.

Rosenberg et al. are silent regarding the addition of blocking agents to the prepolymers to yield blocked isocyanate group containing prepolymers; however, the blocking of diphenylmethane diisocyanate derived prepolymers with conventional blocking agents, such as those claimed, to yield storage stable prepolymers was known at the time of invention. This position is supported by the disclosures and examples of Rizk et al. and Lander. Therefore, since the blocking of MDI prepolymers to obtain storage stable reactants and/or one-component coating or sealing compositions was a conventional practice at the time of invention, the position is taken that it would have been obvious to block the prepolymers of the primary reference for the same reasons.

(10) Response to Argument

Response to Arguments With Respect to Issue I

Appellants have essentially argued that the higher boiling point solvent of Rosenberg et al. is excluded by the "consisting of" language within step (A) of claim 34. In response, appellants' argument that the recited "consisting of" language limits claim 34 to using only the recited solvents sets forth a claim interpretation that the examiner considers to be unreasonably narrow. Despite appellants' arguments, the examiner maintains that the argued higher boiling point solvent has not been definitively excluded by the argued "consisting of" language. The position is taken that appellants' "comprising" language within the preamble causes the claims to be open to the inclusion of additional components and processing steps, including the use of the argued additional or high boiling point solvent of the prior art. It is by no means clear that the argued "consisting of" language is adequate to exclude the argued solvent from the full scope of the claim. It remains the examiner's position that while the solvents for the diisocyanate monomer solution set forth within step (A) of claim 34 are limited by the "consisting of" language, it is not seen that this limitation is operative for the full scope of claim 34.

At page 12, lines 19-25 of the Appeal Brief, appellants argue that regardless of when the solvent is added, the solution still must have solvents consisting of the lower boiling point inert solvents relative to MDI. In response, while the recited solution of MDI monomer of step (A) is so limited, there is no requirement that precludes the addition of solvent with the polyol or precludes the addition of solvent subsequent to step (A). There is simply no reason to believe that the argued "consisting of" language applies to anything other than the solvents for producing the MDI monomer solution of step (A) and the resulting MDI monomer solution of step (A). It

is noted that within step (B), the argued solution of step (A) is not even recited, step (B) merely refers to the formation of a mixture open (note the use of “comprising”) to the inclusion of any material or component.

The prior art makes clear that the solvents may be added at the start of prepolymer synthesis or any time during reaction prior to distillation (see column 6, lines 13-15, 42, and 43 of Rosenberg et al.). With this in mind, the position is taken that the claims are open to the addition of the argued solvent with the polyol component prior to reaction or as an individual component at any point during reaction prior to distillation, such as within appellants’ claimed step (B), and that such permutations are encompassed by the prior art. Accordingly, the disclosure of Rosenberg et al. is adequate to anticipate the claims.

Response to Arguments With Respect to Issue II

Appellants argue that Rizk and Lander fail to teach the use of a low boiling point solvent in a process as recited within claim 34; therefore, appellants argue that Rizk and Lander cannot remedy the deficiencies of Rosenberg et al. with respect to claim 34. In response, the secondary references have not been relied upon to teach a solvent component; they have been relied upon for their teachings concerning the blocking of polyisocyanates. Accordingly, since no arguments have been provided with respect to the relied upon teachings of the secondary references, appellants and the Board are directed to the response set forth above with respect to Issue I.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

/Rabon Sergent/

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